

Brief Update: Washington State Pertussis Outbreak

ACIP Meeting, June 2012

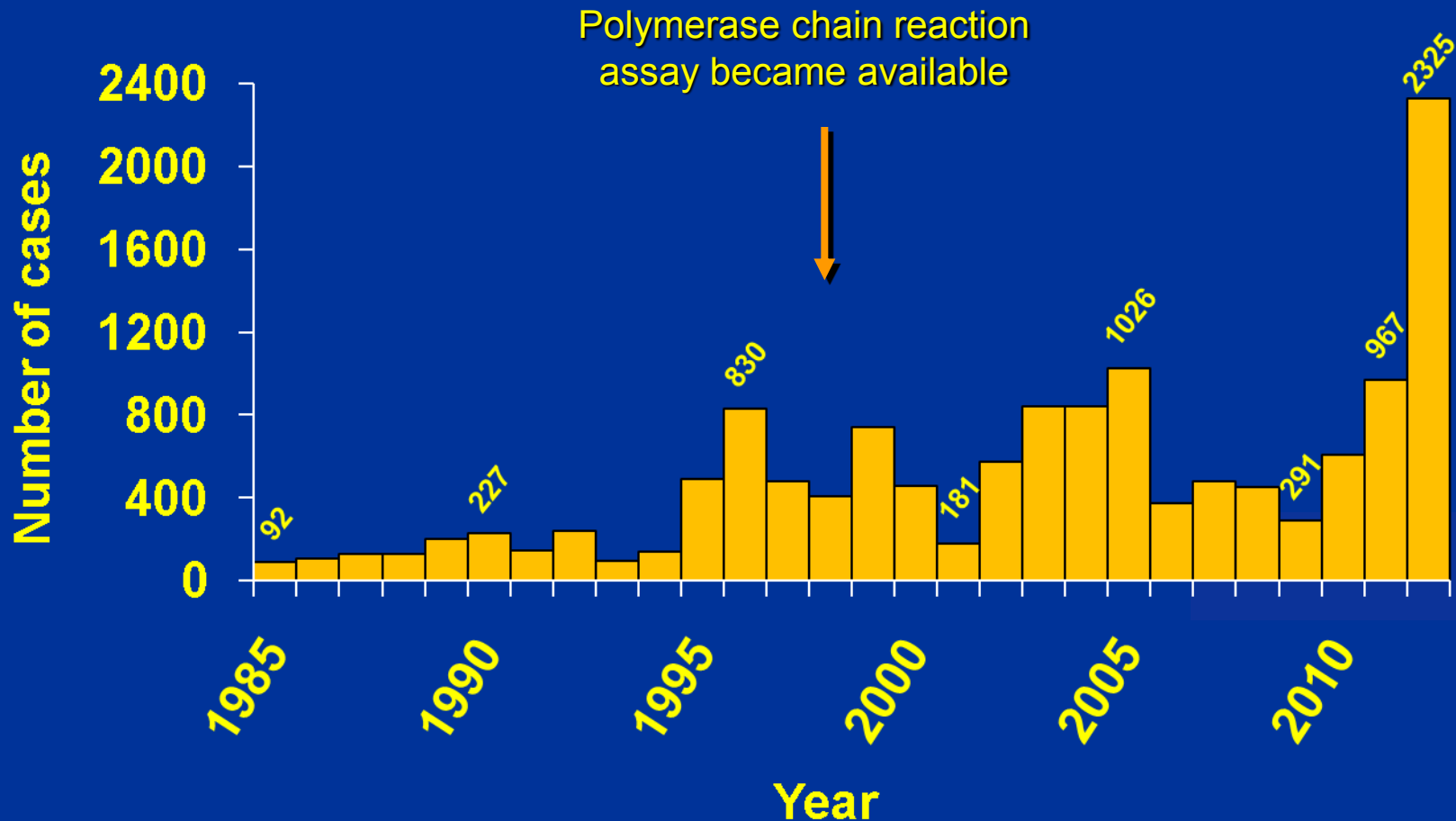
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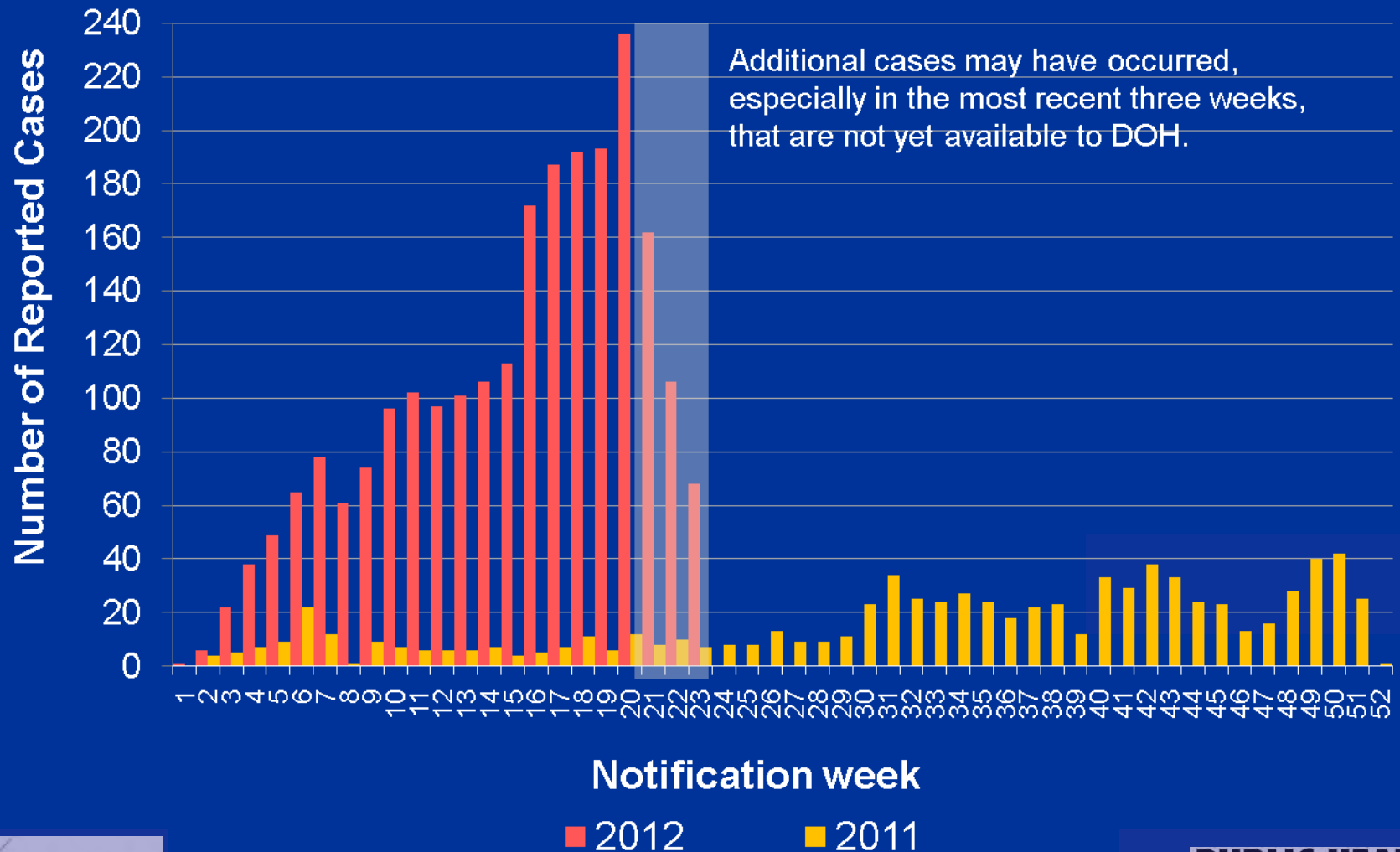
Reported cases of pertussis

Washington State 1985 - 9 June 2012

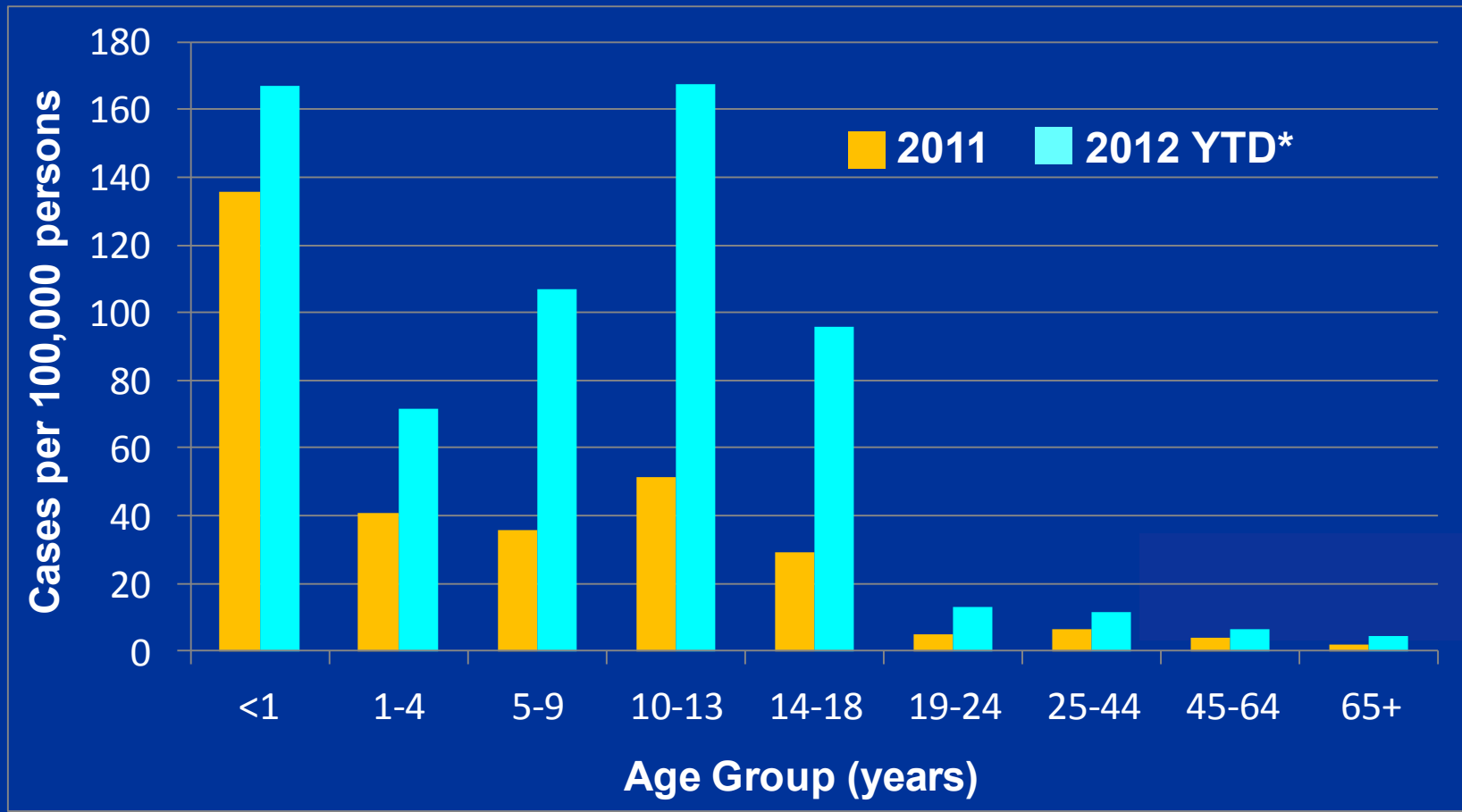


Number of Pertussis Cases Reported in Washington State by Notification Week

2011 vs. 2012 YTD (through 9 June 2012)



Pertussis Incidence by Age Group Washington, 2011 and 2012 YTD (9 June 2012)



* 2012 incidence based on year to date case counts and is not an annual rate

Median age of reported pertussis cases Washington, 1989-2011 and 2012 YTD (9 June 2012)



Preliminary Data

Confirmed pertussis cases by age group in King County, WA, reported 01/01/2012 through 06/09/2012

Age Group	No. of Cases (%)	Rate (cases per 100K) (95% CI)	WA State Rate ⁴ (cases per 100K)	5 Yr Avg Rate ⁵ (cases per 100K person years)	Hospitalized (%)	Imms UTD ^{6,7} (%)
< 1 yr	26 (6.6)	105.9 (69.2-155.1)	167.1	68.4	7 (26.9)	18 (69.2)
1-4 yrs	29 (7.4)	30.3 (20.3-43.5)	71.8	12.3	0 (0.0)	18 (62.1)
5-9 yrs	51 (12.9)	45.0 (33.5-59.2)	107.0	8.3	0 (0.0)	36 (70.6)
10-13 yrs	120 (30.5)	135.3 (112.2-161.8)	167.4	9.2	0 (0.0)	83 (69.2)
14-18 yrs	88 (22.3)	76.3 (61.2-94.0)	95.7	6.8	0 (0.0)	69 (78.4)
19-24 yrs	9 (2.3)	5.8 (2.7-11.1)	12.8	2.3	0 (0.0)	4 (44.4)
25-44 yrs	32 (8.1)	5.3 (3.6-7.4)	11.6	2.1	0 (0.0)	5 (15.6)
45-64 yrs	32 (8.1)	6.2 (4.2-8.7)	6.6	1.1	0 (0.0)	9 (28.1)
65+ yrs	7 (1.8)	3.3 (1.3-6.8)	4.5	0.9	2 (28.6)	1 (14.3)
Total	394	20.4 (18.4-22.5)	34.5	4.0	9 (2.3)	243 (61.7)

¹ Cases reported includes confirmed, probable, and suspect cases.

² The # of cases to-date in 2012 is greater than two std. deviations above the five year mean.

³ Data likely underestimate the true number of cases because many persons with pertussis are not diagnosed through laboratory testing and/or reporting.

⁴ Washington State rates include counts for both confirmed and probable cases.

⁵ Five year average rate excludes the current year.

⁶ Imms up to date (UTD), for the purpose of this summary: persons less than 11 years of age with the documented age appropriate number of doses for DTaP are considered up to date; persons 11 years of age and older with a documented Tdap are considered up to date.

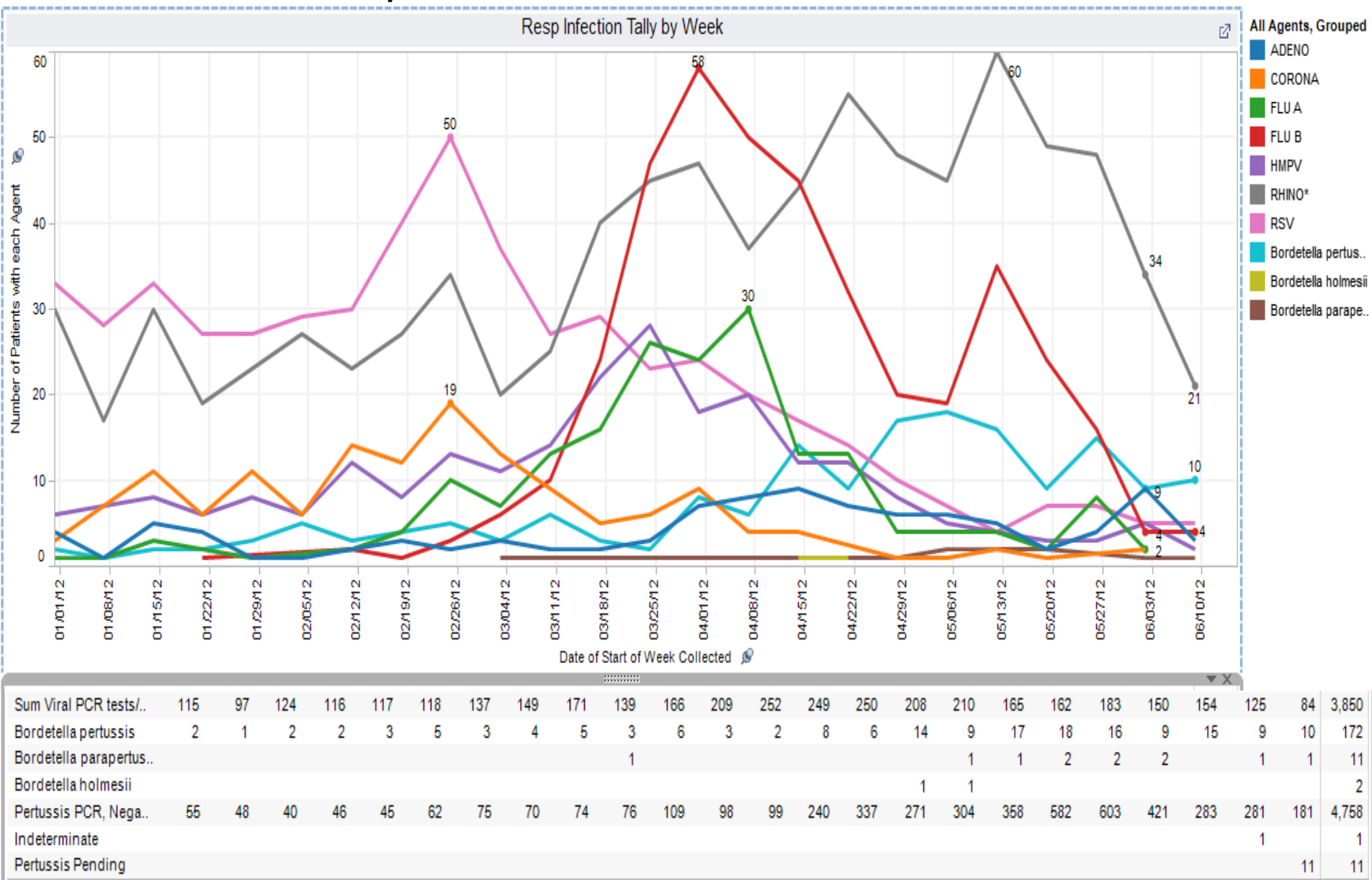
⁷ An avg of 2% of cases per age group are pending immunization status or data are not available.

Weekly count of confirmed pertussis cases by report week and year, King County, WA



(Note: 2005 is included for comparison because it had the highest reported pertussis activity in King County in the past decade.)

Respiratory Virus & Pertussis PCR Tests, Seattle Children's Hospital, Jan 1, 2012 – June 10, 2012



Courtesy of Xuan Qin, Jenny Strapp, Seattle Children's Hospital

WA State Pertussis Outbreak

Response Activities

- Public messaging (TV, radio, print media, web-based, social media, YouTube)
- Gov. Gregoire, Sen. Cantwell, WA Secretary of Health
- Health care provider education
- Local health jurisdiction communications from WA DOH
- Resources for schools, camps, child care, businesses
- Revised surveillance, reporting & investigation guidelines
- Increase vaccine access for un- and underinsured
 - GIFT (AmeriCares/Sanofi Pasteur) program: Over 19,000 doses distributed statewide through May 1, 2012
 - Federally funded Tdap for un/underinsured adults: 27,400 doses distributed to local public health and tribes
 - Community vaccination clinics

WA State Pertussis Outbreak

Challenges

- Resurgence of disease in immunized population
- Clinical case definition not optimal for case management
- PCR expensive
- No point-of-care rapid diagnostic test
- Diminishing local public health resources compromises outbreak response
 - Increased FTE devoted to pertussis response over 10-fold at Public Health Seattle-King County
- Adolescent and adult immunization coverage
 - Access to vaccine for under/uninsured adults

Acknowledgements

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